

Application Serial No: 10/598,903
Responsive to the Office Action mailed on: April 7, 2008

REMARKS

This Amendment is in response to the Office Action mailed on April 7, 2008. Claims 1 and 8 are amended. Claim 1 is amended editorially to include features of claim 7. Claim 1 is further amended editorially and is supported, for example, in the specification at page 9, lines 18-23 and in Figure 7. Claim 8 is amended to track the amendments to claim 1. Claim 7 is cancelled without prejudice or disclaimer. No new matter is added. Claims 1 and 8 are pending.

Specification Objections:

The title is objected to as not being descriptive. The title is amended to clearly indicate the invention to which the claims are directed. Withdrawal of this objection is requested.

Prior Art Rejections:

Claim 1 is rejected as being anticipated by Osamu (JP No. 2001-326879). This rejection is moot as claim 1 is amended to include features of claim 7, which was not rejected. Applicants do not concede the correctness of this rejection. Claims 7 and 8 are rejected as being unpatentable over Osamu in view of Toshimitsu (JP No. 11-284113). Applicants respectfully traverse this rejection.

Claim 1 is directed to a driver module structure that requires, among other features, a flexible circuit board provided with a wiring pattern that has a cavity that exposes a portion of a ground wiring pattern. Claim 1 further requires that the exposed portion of the ground wiring pattern and a heat-radiating member are connected to establish electrical continuity via a member that is fitted into the cavity. The cavity is a through hole penetrating the ground wiring pattern, a portion of the ground wiring pattern on an opposite side from the heat-radiating member is exposed, and a member fitted into the cavity is a screw for fastening the flexible circuit board and the heat-radiating member. An advantage of using a screw for fastening the flexible circuit board and the heat-radiating member is a greater bond strength and a reliable electrical connection of the flexible circuit board and the heat-radiating member can be achieved inexpensively.

Application Serial No: 10/598,903
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The combination of Osamu and Toshimitsu does not teach or suggest these features. The rejection asserts that Toshimitsu teaches a member fitted into the cavity is a screw for fastening the flexible circuit board and the heat-radiating member. Toshimitsu is directed to a heat radiation mechanism for semiconductor integrated device that has a heat sink (20) connected to a circuit board (30) via legs (21) that protrude from the heat sink (20) (see Figure 1 of Toshimitsu). In contrast, claim 1 requires a screw for fastening the flexible circuit board and the heat-radiating member. Nowhere does Toshimitsu suggest modifying its configuration in order to provide a screw for fastening the circuit board (30) and the heat sink (20).

Osamu does not overcome these deficiencies of Toshimitsu. Osamu is directed to a display driver that uses a projection (15) of a metallic plate (13) to fit into a recess of a flexible board (11). The recess penetrates a coverlay (17), but does not penetrate the copper pattern (16). Nowhere does Osamu suggest that its recess is a through hole penetrating the copper pattern (16), a portion of a ground wiring pattern on an opposite side from the metallic plate (13) is exposed, and a member fitted into the recess is a screw for fastening the flexible board (11) and the metallic plate (13), as required by claim 1. Also, nowhere does either Osamu or Toshimitsu contemplate modifying its devices to the configuration of claim 1 in order to achieve a greater bond strength or a reliable electrical connection of the flexible circuit board and the heat-radiating member inexpensively. For at least these reasons claim 1 is not suggested by the combination of Osamu and Toshimitsu and should be allowed. Claim 8 depends from claim 1 and should be allowed for at least the same reasons.

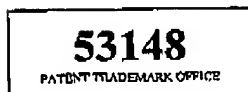
Application Serial No: 10/598,903
Responsive to the Office Action mailed on: April 7, 2008

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Conclusion:

Applicants respectfully assert that claims 1 and 8 are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



Dated: July 7, 2008

Respectfully submitted,

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